

1-5. (CANCELED)

6. (CURRENTLY AMENDED) A machine tool planetary transmission for machine tools, the planetary transmission comprising:

 a drive shaft (1) connected to a sun gear (2);

 an output shaft (3) connected to a planetary carrier (10);

 an interior internal gear (4) which, in a first operating position, engages with being coupled to a housing and, in a second operating position, engages with being coupled to the sun gear;

 a hub (6) [[that]] concentrically surrounds surrounding the drive shaft (1); [[and]]

 a sliding collar (5) [[that]] concentrically surrounds surrounding the hub (6) and being axially movable over and with respect to the internal gear (4);

in the first operating position, the sliding collar (5) couples the internal gear (4) to the housing (12), and, in a second operating position, the sliding collar (5) couples the internal gear (4) to the hub (6), and engages with the hub (6) in one of the first operating position and the second operating position;

wherein an end of the sliding collar (5), remote from the internal gear (4), has an integral centering bore (7) which is concentric with the hub (6), and

the hub (6) includes a centering collar (8) which is concentric with an axis of the hub (6) and located along the axis of the hub (6) so that the centering bore (7) of the sliding collar (5) concentrically surrounds and engages with the centering collar (8) when a locking arrangement of the sliding collar (5) engages with a mating locking arrangement of the hub (6) in the second operating position

the sliding collar (5) engages a centering bore (7) in the loose end of the interior gear (4) concentrically located outside the hub (6), and

the centering bore (7), in the engaged position of the sliding collar (5), concentrically engages with the hub (6) over an axle of the hub and is placed over a centering collar (8).

7. (CURRENTLY AMENDED) The machine tool planetary transmission according to claim 6, wherein the centering bore (7) first comes into contact with the centering collar (8) by approaching the centering collar (8), axially in a displacement direction of the centering bore (7), with a beveled running edge of the centering [[diameter]] bore (7).

8. (CURRENTLY AMENDED) The machine tool planetary transmission according to claim[[s]] 6, wherein the centering collar (8) first comes into contact with the centering bore (7) by approaching the centering bore (7), axially in a displacement direction of the centering bore (7), with the beveled running edge of the centering collar (8).

9. (CANCELED).

10. (CANCELED).

11. (NEW) The machine tool planetary transmission according to claim 6, wherein sliding collar (5) is movable between the first and the second operating positions only when the drive shaft (1) is stationary.

12. (NEW) The machine tool planetary transmission according to claim 6, wherein a largest diameter portion of the hub (6) includes the centering collar (8) and an external tooth locking arrangement is located adjacent the centering collar (8) and the sliding collar (5) engages, upon movement of the sliding collar (5) to the second position, both the external tooth locking arrangement and the centering collar (8).

13. (NEW) The machine tool planetary transmission according to claim 6, wherein a diameter of the centering bore (7) is larger than a largest diameter portion of the hub (6) so that the completely surrounds the largest diameter portion of the hub (6).

14. (NEW) A planetary gear incorporated into a machine tool, the planetary gear comprising:

an input shaft(1) being connected to a sun gear (2);
an output shaft (3) being connected to a planet carrier (10); and
an internal gear (4) being connectable, in a first shifting position, with a housing (12) of the machine tool, and, in a second shifting position, with the sun gear (2);

a hub (6) concentrically surrounding the input shaft (1);
a sliding sleeve (5) concentrically surrounding the hub (6) and being movable along and over the hub (6) to the second shifting position to positively engage with the hub (6) with the sliding sleeve (5);

wherein the sliding sleeve (5) is provided with a centering section (7), on an end thereof remote from the internal gear (4), featuring a centering diameter(7') which is concentrically arranged with the hub (6), and this centering section (7) is formed unitary with the sliding sleeve (5); and

the hub (6) has a centering collar (8) arranged concentrically with an axis of the hub (6), and during positive engagement of the sliding sleeve (5) with the hub (6), the centering section (7) surrounds and abuts against the centering collar (8).

15. (NEW) The planetary gear incorporated into a machine tool according to claim 14, wherein a leading edge of the centering section is provided with a bevel, extending transverse to a displacement direction of the centering section, and the bevel first contacts the centering collar (8) as the centering section (7) approaches.

16. (NEW) The planetary gear incorporated into a machine tool according to claim 14, wherein a leading edge of the centering collar (8) is provided with a bevel, extending transverse to a displacement direction of the centering section, and the bevel first contacts the centering section (7) as the centering section (7) approaches.

17. (NEW) The machine tool planetary transmission according to claim 14, wherein sliding collar (5) is movable between the first and the second operating

positions only when the drive shaft (1) is stationary.

18. (NEW) The machine tool planetary transmission according to claim 14, wherein a largest diameter portion of the hub (6) includes the centering collar (8) and an external tooth arrangement is located adjacent the centering collar (8) and the sliding collar (5) engages, upon movement of the sliding collar (5) to the second position, both the external tooth arrangement and the centering collar (8).

19. (NEW) The machine tool planetary transmission according to claim 14, wherein a diameter of the centering bore (7) is larger than a largest diameter portion of the hub (6) so that the completely surrounds the largest diameter portion of the hub (6).

20. (NEW) A machine tool planetary transmission which is shiftable between first and second operating positions only when a drive shaft (1) is stationary, the planetary transmission comprising:

the drive shaft (1) being connected to a sun gear (2);

an output shaft (3) being connected to a planetary carrier (10);

an internal gear (4) which, in the first operating position, being coupled to a housing and, in the second operating position, being coupled to the sun gear;

a hub (6) concentrically surrounding the drive shaft (1);

a sliding collar (5) concentrically surrounding the hub (6) and being axially movable over and with respect to the internal gear (4),

in the first operating position, the sliding collar (5) coupling the internal gear (4) to the housing (12), and, in a second operating position, the sliding collar (5) coupling the internal gear (4) to the hub (6);

wherein an end of the sliding collar (5), remote from the internal gear (4), has an integral centering bore (7) which is concentric with the hub (6),

the hub (6) includes a centering collar (8) concentric with an axis of the hub (6) and located along the axis of the hub (6) so that, when the sliding collar (5) is

moved to the second operating position and surrounds and engages with the hub (6), the centering bore (7) of the sliding collar (5) concentrically surrounds and engages with the centering collar (8); and

an external tooth arrangement is located adjacent the centering collar (8) on a largest diameter section of the hub (6) and, upon movement of the sliding collar (5) to the second position, both the external tooth arrangement and the centering collar (8) engage with the sliding collar (5) to facilitate transmission of drive to the internal gear (4).